5

10

15

## ABSTRACT OF THE DISCLOSURE

A method and apparatus, including a computer program apparatus, implementing techniques for reducing aliasing artifacts when shaping a digital image such as a digital matte. Prior to shaping the image, the computer program generates a set of subpixel data values as a function of the pixels of the digital image. Each subpixel data value has an integer component and a fractional component and represents an interpolation between the corresponding pixel and one or more adjacent pixels. After generating the subpixel data values, the computer program maps the subpixel data values to new subpixel data values. The computer program adjusts the original pixel data according to the new subpixel data values, thereby shaping the image. In one configuration, the computer program applies additional lookup tables or image processing operations, such as image shading, directly to the new subpixel data values before updating the pixel data. In this fashion the computer program applies the operation at a higher resolution than if applied directly to the original pixel data, thereby reducing aliasing artifacts that might otherwise be introduced by shaping the digital image.